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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,465	05/30/2001	Jesse Donaldson	PALM-3639	1512

7590 08/26/2004

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EXAMINER	
PENDLETON, BRIAN T	
ART UNIT	**PAPER NUMBER**
2644	6

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/871,465	DONALDSON ET AL.	
	Examiner	Art Unit	
	Brian T. Pendleton	2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 June 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15,24 and 28-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15,24 and 28-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 6/8/04 have been fully considered but they are not persuasive.

2. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 2, 4, 6, 9-11, 14, 15, 24, 28, 29, 32, and 33 are rejected under 35 U.S.C. 102(e) as being anticipated by Kanamori et al.

Kanamori et al teach a portable telephone set (which is handheld) comprising first audio source 101 coupled to first variable attenuator/amplifier 203, second audio source 110 coupled to second variable attenuator/amplifier 205, control unit 111 and mixer 206 for outputting an audio signal. The first audio source 101 is a talking voice signal while second audio source 110 is a music information storage part (see column 5 lines 15-16). The main control unit 111 instructs

the first and second variable attenuators/amplifiers 203, 205 to adjust their volumes via the gain control part 201. See column 5 lines 27-42. The main control unit 111 acts as a priority logic unit for assigning priority levels to the audio sources since it determines the volumes of the voice signal from source 101 and the music signal from source 110 based on whether the phone is in music replay mode, communication mode, or when a call is received over the radio communication network during music replay. Specifically, column 6 lines 12-15 indicate that during telephone communication, the music is muted using gain control part 201, while column 6 lines 43-47 indicate that during music replay, voice signals are muted using gain control part 201. When a call is received during music replay, the gain control part 201 adjusts the volume of the music and outputs a ring tone through the first variable attenuator/amplifier 203. See column 7 lines 11-53. Therefore the main control unit 111 has programmed rules for determining the volume of first and second audio sources and demonstrates a priority system based on the presence of the first and second audio sources and the mode of the phone which determines the audio output (nature of an audio output). Claim 1 is met. As to claim 2, the first audio source is a ring tone which is a signal event and the second audio source is music which is continuous. As to claim 4, the apparatus provides for an adjustment of the music signal and voice signal once the user starts talking after answering the telephone responding to a ring tone. See column 7 line 54 - column 8 line 18. Therefore a priority is established for two continuous audio sources. Per claim 6, main control part 111 is coupled to A/D converter 104, representing the priority logic unit. As to claim 9, the first audio source is a wireless communication signal. Per claims 10 and 11, music information storage part 110 is a digital storage medium and can be the first audio source and the talking voice be the second audio source. As to claim 14, the apparatus performs

the claimed method. The main control unit 111 establishes a priority for the first and second audio sources based on their presence and output signals (which is based on the mode of the phone, the output signals being a ring tone or music or voice). The ring tone has a higher priority than the music signal since the music signal is lowered in volume or the ring tone is increased in volume so that the ring tone can be recognized by the user. Therefore one of the audio sources is adjusted in level and the sources are combined in mixer 206. Regarding claim 15, inherently there is a predetermined level in which one of the audio sources is adjusted in volume. Thus, the new volume level establishes a predetermined ratio between the two audio sources. Per claim 24, the main control unit 111 controls operation of the telephone device and inherently executes computer instructions which establish the priority between the audio sources as a function of the audio sources and a plurality of outputs and adjust the volume level of the signals. Regarding claims 29 and 32, column 2 lines 23-30 disclose that when the music replayed is the first audio source and the ring tone is the second audio source, the music replayed is decreased in volume. As to claim 28, when a call is answered and there exists a voice signal as the first audio source and the music replayed as the second audio source, the voice signal is amplified. See column 7 lines 47-53.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 3, 5, 7, 8, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanamori et al in view of Kim. Kanamori et al teach a handheld device having first and second audio sources, first and second variable attenuators/amplifiers, a priority logic unit, mixer and output. Kanamori et al do not teach that the device has more than two audio sources. However, that feature was well known in the art as evidenced by Kim. Kim discloses a mobile entertainment and communication device having more than two audio sources (alarm 123, computer jack 124 for connection to media players, memory card 200). It would have been obvious to one of ordinary skill in the art at the time of invention to include additional audio sources in the invention of Kanamori et al since it was already practiced in the art and provided an user with greater capabilities in the telephone. Regarding claim 5, the alarm 123 and tone ring are two signal event audio sources. Per claim 7, Examiner takes Official Notice that cellular phones at the time of invention comprised memory buffers, said buffers used to store a signal event such as a message received signal which is replayed at a later time. As to claim 8, it was obvious to reproduce stereophonic music with the advantage of better sound localization and "feel" of the audio. Per claims 12 and 13, Kanamori et al do not teach a flash memory for the music storage or that the memory is removable. Kim discloses memory card 200 which is removable and a flash memory unit (see column 2 lines 20-22).

6. Claims 30 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanamori et al. Kanamori et al do not disclose instructions for adjusting the first one of a plurality of audio signals by delaying in time the first one of the plurality of audio signals. Official Notice is taken that the concept and advantages of delaying a lower priority signal while outputting a higher priority signal were well known. It would have been obvious to one of

ordinary skill in the art at the time of invention to delay, for example, the voice mail indicating signal while voice sounds were being transmitted for the purpose of not distracting from an ongoing conversation. The use of this technique eliminated the scenario that talkers are interrupted with an alert that cannot be conveniently addressed in the span of a conversation.

7. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanamori et al in view of Tran et al. Kanamori et al do not disclose that the priority logic unit assigns priority levels according to the nature of an audio output, which consists of one or more of a speaker, headphone jack and a line out. However, it was well known to amplify differently according to a specific audio output device, as evidenced by Tran et al. Tran et al disclose a speaker detection circuit which determines the impedance level of connected speakers and adjusts the amplification level accordingly. It would have been obvious to one of ordinary skill in the art at the time of invention to adjust the volume levels of amplifiers 203 and 205 based on a specific audio output, as taught by Tran et al, for the purpose of supplying the correctly amplified signal to an electroacoustic device without overdriving the device or producing a sound signal too soft.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Van Ryzin, US Patent 6,052,471.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian T. Pendleton whose telephone number is (703) 305-9509. The examiner can normally be reached on M-F 7-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on (703) 305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

B. T. P.

btp

XU MEI
PRIMARY EXAMINER